| Work Order ID 99384 April-05-13 1:24:49 PM Item ID: D3022-1 Revision ID: | 9384 | | *993 | 384* | | | | | | Page 1 | |
|---|---------------------|--|--|----------------------|------------------------|------------|--------------|---------------|-------------------|------------------|----------------|
| Revision ID: | D3022-1 Seat Pan | | | Accept | *N900 | 040 | 100 |) * s | etup Star Stop | I VI | S1* S2* |
| | 4/04/13 | Start Qty: 1.00 Req'd Qty: 1.00 | *1* *1* | | Cust Item II Customer: | D: | | | | | . 1/ |
| Approvals: | Process P | lan: MUS | Date: <u>13-04-0</u> | SPC (Y/N): | | ite: | | R | tun Star Stoj | | R1* R2* |
| Sequence ID/ Work Center II |) | Operation Description | | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
| Draw Nbr | Re | evision Nbr | | | . , | | | | | - (fact also | |
| D3022 | Re | ev B | | | | | | | | | |
| *100 *100* Waterjet FLOW CNC Waterje 2024 03 | | Dwg Rev:_ Prog Rev:_ *** grind o | direction along 31.700" ** ES,TRANSFER DRILLE | | | | | | ٥ | | Jm13-4-15 |
| 110 *11 0 * | | QC2- Inspect parts off n | nachine FAI/FAIB | 0.00 | ** | · | | | <u> </u> | | Jm13-4-16 |

Quality Control

| | | | | | | | | | | DQA: | Dat | e: _ | |
|-----------------------|-----------|----------|----------|------------|----------------------------|----------|---------|-------------------------|-----------|---------------|---------------|----------|--|
| NCR: Y | es / No | | | | WORK ORDER NON-C | ON | IFORI | MANCE / UPDATE | | | | _ | |
| ander to a secondario | | | | | | | | | | QA Closed: | Dat | e: | No. of the second secon |
| | | | | | DISPOSITION | | | AGAINST | DE | PARTMENT/ | PROCESS | | |
| Work Orde | er: | | | | Rework | , | | Skid-tube Crosstube | | | Water Jet | \neg | Engineering |
| Dart N | lo. | | | | Scrap | | | Machining Small Fab | | Proc | d. Eng. Coor. | \dashv | Quality |
| Part N | ···. | | | | Use-as-is | 1 | | noforming Finishing | - | 1 | e/Packaging | ᅥ | Other |
| NCR N | ۱o | | | | Work Order Update | | | Large Fab Composite | | , | Supplier | | |
| Root | | T | | Descri | ption of work order update | l Ir | nitial | Action | | Sign & | | | and the second seco |
| Cause | Date | Step | Qty | l ' | or Non-conformance | Chi | ef Eng | Description | | Date | Verification | 1 | QC Inspector |
| Doc/Data | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | |
| Setup | | | | | • | | | | | | | | |
| Other | | | | | | } | | | | | | | |
| Process | | | | | | ļ | | | | | | | |
| Supplier | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | |
| Unapproved | | <u> </u> | ļ | l | | | | | | <u> </u> | | | |
| | | | | | | AUL' | T CATE | GORY | | | | | |
| Landi | ng Gear | | | | General | | | | | 1 | [| | - (- |
| | Bending | | | | Bend | - | Grain | | _ | Ovalized | | | Pressure/Forced |
| | Centre N | ot Conce | ntric to | o/s | BOM/Route | \vdash | Hardwa | | - | Over/Under | | | Temperature/Cure |
| | Cracks | | | <u> </u> _ | Broken/Damaged | \vdash | | ion Incomplete | - | Part Incorred | 1 | - | Weld |
| | Crushed/ | 'Crimped | | - | Burrs | - | | ions Incomplete/Unclear | - | Part Lost/Mi | ssing | | Wrong Stock Pulled |
| | Cuffs | | | | Contamination | Н | Mainte | | - | Part Moved | ., | | |
| | Heat Trea | at | | 1 | Countersink | | Mislabe | eled | | Positioned V | vrong | | |

Misread Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Other

Power Loss/Surge

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

| Work Orde April-05-13 1:2 | | 0384 | | *9 | 938 | 4 * | | | | | | Page 2 |
|--|---------------------|---|------------------------|---------------------------|--------|------------------------|------------|--------------|---------------|-------------------|------------------|----------------|
| Item ID: Revision ID: Item Name: | D3022-1 Seat Pan | | | Accept | * | V 900 | 040 | 100 |)* s | etup Star Stop | I VI - | S1* S2* |
| Start Date: Required Date: Reference: | 4/04/13 4/19/13 | Start Qty: 1.00 Req'd Qty: 1.00 | *1* *1* | | | Cust Item II Customer: | D: | | | | | |
| Approvals: | Process Pl QC: | an: | Date: | Tooling: SPC (Y/N) |): · | | nte: | | R | tun Star Stop | | R1* R2* |
| Sequence ID/ Work Center II 120 *120* | D | Operation Description QC8- Inspect parts - seco | and check | Set Up/ Run Ho 0.00 | | Tool ID | Tool# | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
| Quality Control | | Bend as per dwg | | 0.00 | 13 917 | ο . | | | i | | | St 136. |
| *130* Brake NC Brake NC | | Memo | | 0.00 | | | | | | | | |
| 140 *140* QC | | QC5- Inspect part compl | eteness to step on W/O | 0.00 | 4.73 | | | • | 1 | | | |

Quality Control

| NCR: Y | 'es | / No | | | | WORK ORDER NON-C | | NFORI | MANCE / UPI | DATE | (| QA Closed: | D | ate: | |
|---|-----|--|------------------------------|---------|---------------------------------------|---|-----|--|---|---|-----|---|--|------|--|
| Work Orde | er: | | | Α. Ε | · · · · · · · · · · · · · · · · · · · | DISPOSITION | | - | | AGAINST D | DEP | ARTMENT/ | PROCESS | | |
| Part N | - | | | | | Rework Scrap Use-as-is Work Order Update | | | Skid-tube Machining noforming Large Fab | Crosstube Small Fab Finishing Composite | | | Water Je d. Eng. Coor e/Packaging Supplie | | Engineering Quality Other |
| Root Cause | | Date | Step | Qty | - | tion of work order update or Non-conformance | l . | nitial ief Eng | Act Descr | ion iption | | Sign & Date | Verification | on | QC Inspector |
| Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved | | | | | | | | | | | | | | | |
| | | | | | | F | AUL | T CATE | GORY | AA444. | | | | | |
| Landir | | Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspection | Crimped. it n Strip in | | o/s | General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short | | Instruct Mainte Mislabe Misread | ion Incomplete ions Incomplete/Uenance eled | Jnclear | | Ovalized Over/Under Part Incorrec Part Lost/Mi Part Moved Positioned W Power Loss/S | ct ssing Vrong | | Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other |
| | | Ripples in Torque W | | xtrusio | n | Drill Holes Drawing | H | Offset Out of (| Calibration | | - | *************************************** | | | |

Out of Sequence
Outside Dimensions

DQA:

Date: __

Turning Sequence

Wave/Twist in Tube

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

| Work Orde April-05-13 1:2 | | 9384 | | *993 | 884* | | | | | | | Page 3 |
|----------------------------------|---------------------|--|--------------|----------------------|-------------|------------|--------------|---------------|------------|---------------|------------------|----------------|
| Item ID: Revision ID: Item Name: | D3022-1 Seat Pan | | | Accept | *N900 | 040 | 100 |)* | Setup | Start Stop | ı Vı, | S1* S2* |
| Required Date: | 4/04/13 4/19/13 | Start Qty: 1.00 Req'd Qty: 1.00 | *1* *1* | | Cust Item I | D: | | | | | | |
| Approvals: | Process P QC: | Plan: | Date: | Tooling: SPC (Y/N): | | ite: | - | | Run | Start Stop | 1/7 | R1* R2* |
| Sequence ID/ Work Center II |) | Operation Description Identify as per dwg & St | ock Location | Set Up/ Run Hours | Tool ID | Tool# | Plan Code | Accept Qty | t Re Qt | | Reject Number | Insp. Stamp |
| *200* Packaging Packaging | | Memo | | 0.00 | | | | /X | | | | 8-4-e |

0.00

0.00

QC21- Final Inspection - Work Order Release

Memo

210

*21**0***

Quality Control

M. S. M. J. M

| NCR: \ | ⁄es | / No | | | | WORK ORDER NON- | COI | NFORM | MANCE / UPE | DATE | QA Close | od: 1 | Date: | |
|--|------------|------------|------------|----------|-----|------------------------------|---------|----------|-------------------------------|-------------------------------------|-----------|--|-------|---------------------------|
| - 1, - 1 , | | | | | | DISPOSITION | | [| | AGAINST D | | NT/PROCESS | Jute. | |
| Work Orde | er: | | | | | DISPOSITION | | | | AGAMSTO | | TI/T ROCESS | | |
| Part N | - ۔ No. | ··· | | | | Rework Scrap Use-as-is | _ | ſ | Skid-tube Machining noforming | Crosstube Small Fab Finishing | i | Water Jorod. Eng. Coo tore/Packagir | r. 🔲 | Engineering Quality Other |
| NCR N | No. | | | | | Work Order Update |] | | Large Fab | Composite | | Suppli | er | |
| Root | | | | | 1 ' | ption of work order update | 1 | Initial | Act | | Sign & | 1 | * | |
| Cause | | Date | Step | Qty | (| or Non-conformance | Ch | nief Eng | Descr | iption | Date | Verificat | ion | QC Inspector |
| Doc/Data | | | | | | | | | | | | | | |
| Equip/Tooling | | | | | ļ | | | | | | | | | |
| Operator | | | | | | | | | ŧ | | | | | |
| Material | | | | | | | | | | | | | | |
| Setup | | | | | | • | | | | | | | | |
| Other | | | | | | | | | | | | | | |
| Process | | | | , | | | | | | - | | | | |
| Supplier | | | | | | | | | | | | | | · |
| Training | | | | | | | | | | | | | | |
| Unapproved | | | | <u> </u> | | · | \perp | | | | | | | <u></u> |
| | | | | | | | AUI | LT CATE | GORY | | | | | 1-70-14-14-1 |
| Landi | ng G | ear | | | | General | | 7 | | | - | | _ | 1 |
| | Ш | Bending | | | | Bend | | Grain | | | Ovalized | | Ŀ | Pressure/Forced |
| | | Centre No | ot Concer | ntric to | o/s | BOM/Route | | Hardwa | re | | Over/Un | der tolerance | | Temperature/Cure |
| | | Cracks | | | | Broken/Damaged | L | Inspecti | on Incomplete | | Part Inco | rrect | | Weld |
| | | Crushed/0 | Crimped. | | | Burrs | L | Instruct | ions Incomplete/L | Jnclear | Part Lost | /Missing | | Wrong Stock Pulled |
| | | Cuffs | | | | Contamination | L | Mainte | nance | | Part Mov | ed | | |
| | | Heat Trea | t | | | Countersink | | Mislabe | led | | Positione | d Wrong | | 1 |
| | | Inspection | n Strip in | Tube | | Cut Too Short | | Misread | d | | Power Lo | ss/Surge | | Other |
| | | Ripples in | Bend | | | Drill Holes | | Offset | | | | | | |
| | | Torque W | aves in E | xtrusio | n | Drawing | | Out of 0 | Calibration | | | | | |

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

Work Order ID:

99384

Parent Item:

D3022-1

Parent Item Name:

Seat Pan

Start Date: 4/04/13

Required Date: 4/19/13

Page 1

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP C02.01.23Revised NG

IPP Rev:D 08-04-16 now water jet DD verified by:EC

IPP Rev:E 08-12-18 as per ECN08-582 DD verified by:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|------------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|-------------------|---------------|----------------|--------|
| M2024T3S.032 2024-T3 .032 sheet | | Purchased | No | | | 100 | sf | 639.6522 | 1.6232 | 1.7086316 1.75 | | | Jm13-4 |
| | | | | Location | | Loc Oty | <u>Lo</u> | c Code | | | | | |
| | | | | MAT022 | | 639.6522 | | | | | | | |
| | | | | 1182 | 243 | 32.4962 | | | | | | | |
| | | | | 118: | 523 | 141 | | | | | | | |
| • | | | | 1213 | 309 | 68.656 | | | | | | | |
| | | | | 1230 | 096 | 27.6 | | | | | | | • |
| | | | | 123: | 574 | 81.9 | | | | | | | |
| | | | | 124 | 987 | 288 | | | 124 | F3P | | | |

| | | | | | | | | | | • | DQA: | Date | e: _ | |
|---------------|----------|------------|-----------|------------|-------------|----------------------------|----------|---------|----------------------|--|--------------|---------------|----------|--------------------|
| NCR: Y | es/ | / No | | | | WORK ORDER NON-C | O | NFORM | AANCE / UPDAT | TE | | | | |
| | Order: | | | | | | | | | | QA Closed: | Date | <u> </u> | |
| Work Orda | · r · | | | | | DISPOSITION | | | | AGAINST DEI | PARTMENT | PROCESS | | |
| Work Orde | - | ···· | | | | Rework | | | Skid-tube C | Crosstube | | Water Jet | \neg | Engineering |
| Part N | lo. | | | | | Scrap | | i | <u> </u> | Small Fab | Pro | d. Eng. Coor. | ┪ | Quality |
| | - | | | | | Use-as-is | | | | Finishing | Rec/Stor | e/Packaging | | Other |
| NCR N | ۱o. | | | | | Work Order Update | | | Large Fab Co | omposite 🔃 | | Supplier | | |
| | | | 1 | | | | لـــ | | | | C: 0 | | | |
| Root | - | _ | | _ | | ption of work order update | ł | nitial | Action | | Sign & | Vanitiantian | | OC Inconstan |
| Cause | | Date | Step | Qty | | or Non-conformance | Ch | ief Eng | Description | on | Date | Verification | \dashv | QC Inspector |
| Doc/Data | _ | | | | | | | | | | | | | |
| Equip/Tooling | _ | | | | | | | | | | | | | ŕ |
| Operator | | | 1 | | | | | | | | | | | |
| Material | | | İ | | | | | | | | | | | |
| Setup | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | |
| Process | \dashv | | | | | | | | | | | | | |
| Supplier | - | | | ! | | | | | | | | · | - | |
| Training | _ | | | | | • | | | | • | | | | |
| Unapproved | | | <u> </u> | | | | | T CATE | CORV | | | <u></u> | | |
| Landir | | | | | | General F | 401 | .! CATE | JUNT | | <u></u> | | | |
| Lanuii | | Bending | | | | Bend | | Grain | | | Ovalized | Γ | | Pressure/Forced |
| | | Centre No | nt Concer | atric to 1 | | BOM/Route | | Hardwa | re | <u> </u> | Over/Under | tolerance | | Temperature/Cure |
| | | Cracks | or Concer | itile to | · · | Broken/Damaged | \vdash | 1 | on Incomplete | - | Part Incorre | <u> </u> | | Weld |
| | | Crushed/ | Crimned | | <u> </u> | Burrs | - | 1 ' | ions Incomplete/Uncl | ear | Part Lost/Mi | | - | Wrong Stock Pulled |
| | _ | Cuffs | стапрей. | | | Contamination | \vdash | Mainte | · | | Part Moved | | | |
| | | Heat Trea | ıt. | | | Countersink | \vdash | Mislabe | | | Positioned V | Vrong | | |
| | | Inspection | | Tube | <u> </u> | Cut Too Short | \vdash | Misread | | - | Power Loss/ | | | Other |

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

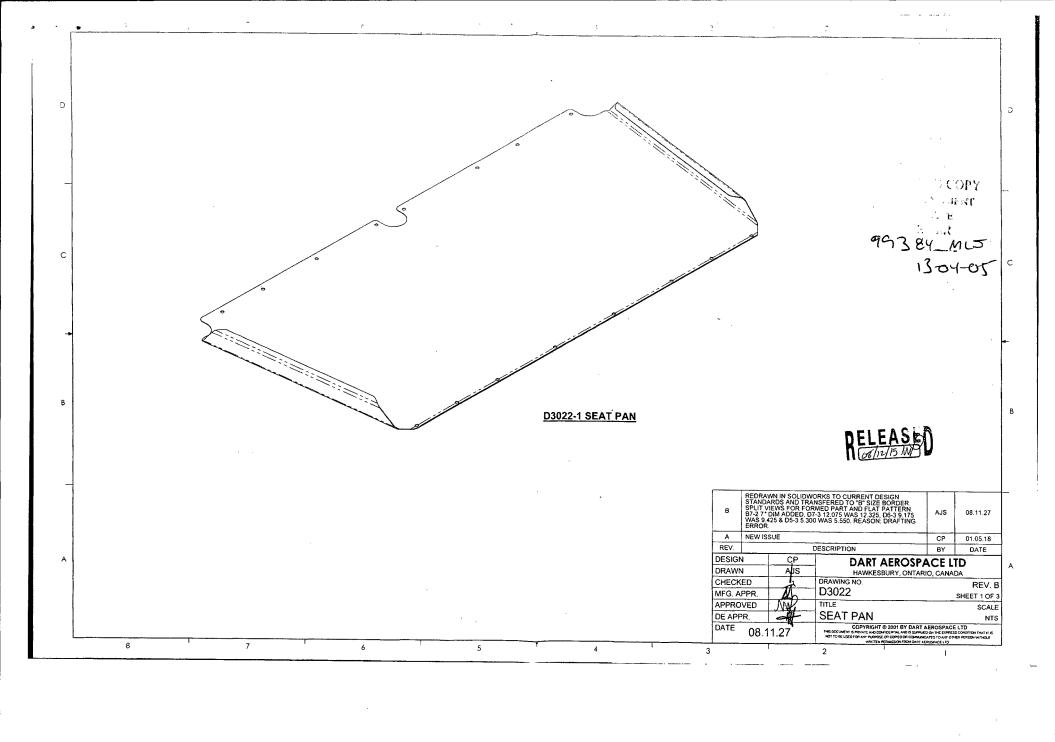
| DART AEROSPACE LTD | Work Order: | 99384 |
|------------------------------|--------------|-------------|
| Description: Seat Pan | Part Number: | D3022-1 |
| Inspection Dwg: D3022 Rev: B | | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

| | | · /((()) | | | | |
|----------------------|-----------|------------------|---|--------|-------------------------|----------|
| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
| 14.75 | +/-0.030 | 14.750" | _ | | T | Jkm06 |
| 12.28 | +/-0.030 | 12.25 | - | | Т | |
| 2.72 | +/-0.030 | 2.72 | _ | | V | Jemoi |
| 14.62 | +/-0.030 | 14.62" | | | T | |
| 12.15 | +/-0.030 | 12.15 | - | | Т | |
| · | | | | | | |
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| Measured by: | J~ | Audited by: | 27 0-69 | Preliminary Approval: | |
|--------------|---------|-------------|------------|-----------------------|--|
| Date: | 13-4-15 | Date: | 1546 | Date: | |

| A 08.06.13 New Issue KJ/DD IN | Approved // |
|--|-------------|
| | 111 |
| B 11.06.21 Dwg Rev updated KJ KJ | |

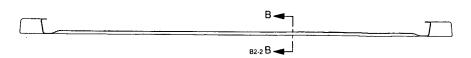


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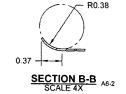
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Ac2-2 B ∙SYM ABOUT



D3022-1 SEAT PAN A

5



*R0.09^{+0.03}_{-0.00}

SCALE 4X

| NOTES: |
|---|
| 1) MATERIAL: MAKE FROM D3022-1F |
| 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 |
| POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3 |
| 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED |
| 4) UNITS: INCHES UNLESS OTHERWISE NOTED |
| 5) BREAK SHARP EDGES: N/A |
| 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3022-1" USING FINE POINT PERMANENT INK MARKER |
| 7) WEIGHT: 1.36 lbs |

8

| DESIGN . | CP | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
|---------------|-----|--|--------------|
| DRAWN | AUS | | |
| CHECKED | 4 | DRAWING NO. | REV. B |
| MFG. APPR. | | D3022 | SHEET 2 OF 3 |
| APPROVED | MAL | TITLE | SCALE |
| DE APPR. | | SEAT PAN | NTS |
| DATE 08.11.27 | | COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS COCCURENT IS PRIVATE AND COMPOSITION, AND IS INSPECTED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PROPER OF COMPOSITION TO ANY OTHER PERSON WITHOUT WARTEN PROPERSONS OF THE OWN DARY REPORTED TO WARTEN PROPERSONS OF THE OWN DARY REPORTED TO WARTEN TO THE OWN DAY REPO | |

